

AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1. (original) A surgical instrument for urging a longitudinal spinal member into a top-loading spinal implant, the instrument comprising:
 - a holder assembly;
 - a release assembly; and
 - an actuating member operatively associated with the holder assembly and the release assembly so that actuation of the actuating member moves the holder assembly with respect to the release assembly;wherein the release assembly comprises a tubular member and a pusher member, the tubular member is sized and configured to be slidably disposed within the holder assembly, and the pusher member is sized and configured to slidably surround at least a portion of the holder assembly.
2. (original) The instrument of claim 1, wherein the holder assembly includes a proximal end and a distal end, the distal end including a pair of fingers for engaging the spinal implant, and the pusher member includes a recess for engaging the longitudinal spinal member so that movement of the holder assembly with respect to the release assembly urges the spinal member into engagement with the spinal implant.
3. (original) The instrument of claim 2, the fingers having a first position in which the spinal implant is freely received therebetween, and a second position in which the fingers contact an underside of an edge of the spinal implant to retain the implant in at least a first axial direction, wherein the fingers are adjustably moveable from the first position to the second position.

4. (currently amended) The instrument of claim 2, wherein the distal end of the holder assembly further includes a pair of U-shaped recesses configured to correspond with the recess formed in the pusher member so that the spinal ~~rod~~ member may extend completely through the holder assembly and the pusher member.

5. (original) The instrument of claim 2, wherein the actuating member is moveable between a rest position and an actuated position, the fingers being biased apart in the rest position and are sized and configured to contact an underside of an edge of the spinal implant in the actuated position.

6. (original) The instrument of claim 2, wherein the pusher member has an interior surface and the fingers have an exterior surface configured to engage the interior surface of the pusher member so that movement of the holder assembly with respect to the release assembly moves the fingers from a first position in which the fingers are separated by a first separation distance to a second position in which the fingers are separated by a second separation distance, the second separation distance being less than the first separation distance.

7. (original) The instrument of claim 6, wherein the fingers are sized and configured so that when in the second position, the fingers engage an underside of an edge of the spinal implant.

8. (original) The instrument of claim 1, wherein the distal end of the tubular member includes at least one hole and the pusher member includes at least one aperture, the at least one hole and the at least one aperture being sized and configured to receive at least one pin for securing the pusher member to the tubular member.

9. (original) The instrument of claim 1, wherein the pusher member includes a proximal section and a distal section disposed along a longitudinal axis of the pusher member, the member having an opening sized and configured to receive the holder assembly coaxially therein.

10. (original) The instrument of claim 1, wherein the tubular member further includes a central bore extending from a proximal end to a distal end of the member, the central bore being sized and configured to receive a fastener.

11. (original) The instrument of claim 1, wherein the proximal end of the holder assembly includes at least one slot sized and configured to receive a portion of the actuating member.

12. (original) The instrument of claim 11, wherein the tubular member further includes a proximal end and a distal end, the proximal end of the tubular member including a first pair of slots sized and configured to receive a portion of the actuating member.

13. (original) The instrument of claim 12, wherein the proximal end of the tubular member further includes a second pair of slots sized and configured to correspond with the slots formed on the holder assembly when the release assembly is inserted into the holder assembly.

14. (original) The instrument of claim 12, wherein the actuating member further includes a first tip and a second tip each sized and configured to snap onto and engage the slots formed in the holder and release assemblies, respectively.

15. (original) The instrument of claim 1, wherein the tubular member includes a proximal end and a distal end, the proximal end of the tubular member includes a slot sized and configured to mate with a pin in the proximal end of the holder assembly to facilitate proper alignment of the tubular member within the holder assembly.

16. (currently amended) The A surgical instrument of claim 1, for urging a longitudinal spinal member into a top-loading spinal implant, the instrument comprising:
a holder assembly;
a release assembly; and

an actuating member operatively associated with the holder assembly and the release assembly so that actuation of the actuating member moves the holder assembly with respect to the release assembly; wherein:

the release assembly comprises a tubular member and a pusher member, the tubular member is sized and configured to be slidably disposed within the holder assembly, and the pusher member is sized and configured to slidably surround at least a portion of the holder assembly; and

the actuating member is a hand grip, the hand grip having a first grip member, a second grip member, a first jaw member, and a second jaw member, the first grip member pivotally coupled to the second grip member, and the first and second jaw members are operatively associated with the holder and release assemblies, respectively.

17. (original) The instrument of claim 16, wherein the first grip member is pivotally coupled to the first jaw member and the second grip member is pivotally coupled to the second jaw member.

18. (original) The instrument of claim 17, wherein the first grip member further includes a pin slidably movable in a slot formed in the second jaw member and the second grip member includes a pin slidably movable in a slot formed in the first jaw member to maintain the jaw members in parallel alignment when the instrument is actuated.

19. (original) The instrument of claim 18, wherein the first and second jaw members further include a tip sized and configured to snap onto and engage corresponding slots formed in the holder and release assemblies.

20. (original) The instrument of claim 19, wherein when the hand grip snaps onto the holder and release assemblies, the hand grip is orientated substantially perpendicular to the longitudinal axes of the holder and release assemblies.

21. (currently amended) The instrument of claim 1 further comprising the longitudinal spinal member and the spinal implant, wherein the longitudinal spinal member is a longitudinal spinal rod and the spinal implant comprises:

- a body having a channel for receiving the spinal rod;
- an anchor member associated with the body[[],]; and
- a fastener for securing the spinal rod to the body and for fixing the angular position of the anchor member with respect to the body.

22. (original) The instrument of claim 21, wherein the body is a generally cylindrical member having an upper portion incorporating the channel, and a lower portion defining a recess, the anchor member further including a curvate head that is shaped and dimensioned to fit within the recess for facilitating polyaxial movement of the body with respect to the anchor member.

23. (original) The instrument of claim 22, wherein the lower portion of the body surrounding the recess is at least partially compressible to allow the body to be snapped over the curvate head.

24. (original) The instrument of claim 23, wherein the spinal implant further includes a collar slidably disposed around the lower portion of the body, the collar having an inner surface that interacts with an exterior surface of the lower portion of the body to compress the recess around the curvate head when the collar is pressed downward with respect to the body.

25. (original) The instrument of claim 24, wherein the fastener is a set screw sized and configured to engage internal threads formed on an inside surface of the upper portion of the body member such that tightening the fastener onto the body moves the fastener against the spinal rod when the rod is located in the channel and urges the spinal rod against the collar causing the collar to move downward along the exterior surface of the lower portion of the body thereby contracting the recess around the curvate head of the anchor member, locking the angular position of the anchor member with respect to the body.

26. (original) The instrument of claim 25, wherein the holder assembly includes a pair of fingers at a distal end thereof, the fingers being sized and configured to allow an axial upward force to be applied to the locking collar.

27. (original) A surgical instrument for urging a longitudinal spinal member into a top-loading spinal implant, the instrument comprising:

a holder assembly having a pair of fingers each including an inward pointing ledge which project radially inwards from an end of the respective finger, the ledge being sized and configured to contact an underside of an edge of the spinal implant;

a release assembly; and

an actuating member wherein the actuating member engages a portion of the holder assembly and a portion of the release assembly so that actuation of the actuating member moves the holder assembly with respect to the release assembly and compresses the fingers from a first position to a second position so that fingers contact the underside of the edge of the spinal implant.

28. (original) The instrument of claim 27, wherein the release assembly includes a recess for engaging the longitudinal spinal member so that movement of the holder assembly with respect to the release assembly urges the spinal member into engagement with the spinal implant.

29. (currently amended) The instrument of claim 28, wherein the holder assembly further includes a pair of U-shaped recesses configured to correspond with the recess formed in the release assembly so that the spinal ~~rod~~ member may extend completely through the holder assembly and the release assembly.

30. (original) The instrument of claim 28, wherein the release assembly comprises a tubular member and a pusher member, the tubular member being sized and configured to be slidably disposed within the holder assembly, and the pusher member being sized and configured to slidably surround at least a portion of the fingers.

31. (original) The instrument of claim 30, wherein the pusher member has an interior surface and the fingers have an exterior surface configured to engage the interior surface of the pusher member so that movement of the holder assembly with respect to the release assembly compresses the fingers from a first separation distance when in the first position to a second separation distance when in the second position, the second separation distance being less than the first separation distance.

32. (original) The instrument of claim 30, wherein the pusher member includes a proximal section and a distal section disposed along a longitudinal axis of the pusher member, the member having an opening sized and configured to receive the holder assembly coaxially therein.

33. (original) The instrument of claim 30, wherein the distal end of the tubular member includes at least one hole and the pusher member includes at least one aperture, the at least one hole and the at least one aperture being sized and configured to receive at least one pin for securing the pusher member to the tubular member.

34. (original) The instrument of claim 27, wherein the release assembly further includes a central bore extending from a proximal end to a distal end of the member, the central bore being sized and configured to receive a fastener.

35. (original) The instrument of claim 27, wherein the proximal end of the holder assembly includes at least one slot sized and configured to receive a portion of the actuating member.

36. (original) The instrument of claim 35, wherein the release assembly further includes a proximal end having a first pair of slots sized and configured to receive a portion of the actuating member.

37. (original) The instrument of claim 36, wherein the proximal end of the release assembly further includes a second pair of slots sized and configured to correspond with the slots formed on the holder assembly when the release assembly is inserted into the holder assembly.

38. (original) The instrument of claim 36, wherein the actuating assembly further includes a first tip and a second tip each sized and configured to snap onto and engage the slots formed in the holder and release assemblies, respectively.

39. (original) The instrument of claim 27, wherein the release assembly includes a proximal end having a slot sized and configured to mate with a pin in the proximal end of the holder assembly to facilitate proper alignment of the release assembly within the holder assembly.

40. (currently amended) The A surgical instrument of claim 27, for urging a longitudinal spinal member into a top-loading spinal implant, the instrument comprising:
a holder assembly having a pair of fingers each including an inward pointing ledge which project radially inwards from an end of the respective finger, the ledge being sized and configured to contact an underside of an edge of the spinal implant;
a release assembly; and
an actuating member wherein the actuating member engages a portion of the holder assembly and a portion of the release assembly so that actuation of the actuating member moves the holder assembly with respect to the release assembly and compresses the fingers from a first position to a second position so that fingers contact the underside of the edge of the spinal implant; wherein:
the actuating member is a hand grip, the hand grip having a first grip member, a second grip member, a first jaw member, and a second jaw member, the first grip member pivotally coupled to the second grip member, and the first and second jaw members are operatively associated with the holder and release assemblies, respectively.

41. (original) The instrument of claim 40, wherein the first grip member is pivotally coupled to the first jaw member and the second grip member is pivotally coupled to the second jaw member.

42. (original) The instrument of claim 41, wherein the first grip member further includes a pin slidably movable in a slot formed in the second jaw member and the second grip member includes a pin slidably movable in a slot formed in the first jaw member to maintain the jaw members in parallel alignment when the instrument is actuated.

43. (original) The instrument of claim 42, wherein the first and second jaw members further include a tip sized and configured to snap onto and engage corresponding slots formed in the holder and release assemblies.

44. (original) The instrument of claim 43, wherein when the hand grip snaps onto the holder assembly and the release assembly, the hand grip is orientated substantially perpendicular to the longitudinal axes of the holder and release assemblies.

45. (currently amended) The instrument of claim 27 further comprising the longitudinal spinal member and the spinal implant, wherein the longitudinal spinal member is a longitudinal spinal rod and the spinal implant comprises:

- a body having a channel for receiving the spinal rod;
- an anchor member associated with the body[[],]; and
- a fastener for securing the spinal rod to the body and for fixing the angular position of the anchor member with respect to the body.

46. (original) The instrument of claim 45, wherein the body is a generally cylindrical member having an upper portion incorporating the channel, and a lower portion defining a recess, the anchor member further including a curvate head that is shaped and dimensioned to fit within the recess for facilitating polyaxial movement of the body with respect to the anchor member.

47. (original) The instrument of claim 46, wherein the lower portion of the body surrounding the recess is at least partially compressible to allow the body to be snapped over the curvate head.

48. (original) The instrument of claim 47, wherein the spinal implant further includes a collar slidably disposed around the lower portion of the body, the collar having an inner surface that interacts with an exterior surface of the lower portion of the body to compress the recess around the curvate head when the collar is pressed downward with respect to the body.

49. (original) The instrument of claim 48, wherein the fastener is a set screw sized and configured to engage internal threads formed on an inside surface of the upper portion of the body member such that tightening the fastener onto the body moves the fastener against the spinal rod when the rod is located in the channel and urges the spinal rod against the collar causing the collar to move downward along the exterior surface of the lower portion of the body thereby contracting the recess around the curvate head of the anchor member, locking the angular position of the anchor member with respect to the body.

50. (original) The instrument of claim 49, wherein the fingers are sized and configured to allow an axial upward force to be applied to the locking collar.

51. (currently amended) A surgical instrument for urging a longitudinal spinal member into a top-loading spinal implant, the instrument comprising:

a holder assembly having a proximal end and a distal end;

a release assembly having a proximal end and a distal end; and

a hand grip having a first tip and a second tip sized and configured to snap onto and engage the proximal end of the holder and release assemblies, respectively, so that actuation of the hand grip moves the holder assembly with respect to the release assembly, wherein:

the proximal end of the holder assembly includes at least one slot sized and configured to receive a portion of the hand grip;

the proximal end of the release assembly includes a first pair of slots sized and configured to receive a portion of the hand grip; and

the proximal end of the release assembly further includes a second pair of slots sized and configured to correspond with the slots formed on the holder assembly when the release assembly is inserted into the holder assembly.

52. – 54. (canceled)

55. (original) The instrument of claim 51, wherein the release assembly comprises a tubular member and a pusher member, the tubular member is sized and configured to be slidably disposed within the holder assembly, and the pusher member is sized and configured to slidably surround at least a portion of the holder assembly.

56. (original) The instrument of claim 55, wherein the distal end of the tubular member includes at least one hole and the pusher member includes at least one aperture, the at least one hole and the at least one aperture being sized and configured to receive at least one pin for securing the pusher member to the tubular member.

57. (original) The instrument of claim 55, wherein the pusher member includes a proximal section and a distal section disposed along a longitudinal axis of the pusher member, the member having an opening sized and configured to receive the holder assembly coaxially therein.

58. (currently amended) The instrument of claim 51, wherein the distal end of the holder assembly further includes a pair of U-shaped recesses configured to correspond with at least one recess formed in the release assembly so that the spinal ~~rod~~ member may extend completely through the holder assembly and the release assembly.

59. (original) The instrument of claim 51, wherein the distal end of the holder assembly includes a pair of fingers for engaging the spinal implant, and the distal end of the

release assembly includes a recess for engaging the longitudinal spinal member so that movement of the holder assembly with respect to the release assembly urges the spinal member into engagement with the spinal implant.

60. (original) The instrument of claim 59, wherein the fingers have a first position in which the spinal implant is freely received therebetween, and a second position in which the fingers contact an underside of an edge of the spinal implant to retain the implant in at least a first axial direction, wherein the fingers are adjustably moveable from the first position to the second position.

61. (original) The instrument of claim 59, wherein the hand grip is moveable between a rest position and an actuated position, the fingers being biased apart in the rest position and are sized and configured to contact an underside of an edge of the spinal implant in the actuated position.

62. (original) The instrument of claim 59, wherein the release assembly has an interior surface and the fingers have an exterior surface configured to engage the interior surface of the release assembly so that movement of the holder assembly with respect to the release assembly moves the fingers from a first position in which the fingers are separated by a first separation distance to a second position in which the fingers are separated by a second separation distance, the second separation distance being less than the first separation distance.

63. (original) The instrument of claim 62, wherein the fingers are sized and configured so that when in the second position, the fingers engage an underside of an edge of the spinal implant.

64. (original) The instrument of claim 51, wherein the release assembly further includes a central bore extending from the proximal end to the distal end of the assembly, the central bore being sized and configured to receive a fastener.

65. (currently amended) ~~The~~ A surgical instrument of claim 51 for urging a longitudinal spinal member into a top-loading spinal implant, the instrument comprising:
a holder assembly having a proximal end and a distal end;
a release assembly having a proximal end and a distal end; and
a hand grip having a first tip and a second tip sized and configured to snap onto and engage the proximal end of the holder and release assemblies, respectively, so that actuation of the hand grip moves the holder assembly with respect to the release assembly,
wherein;

the proximal end of the release assembly includes a slot sized and configured to mate with a pin in the proximal end of the holder assembly to facilitate proper alignment of the release assembly within the holder assembly.

66. (currently amended) ~~The~~ A surgical instrument of claim 51 for urging a longitudinal spinal member into a top-loading spinal implant, the instrument comprising:
a holder assembly having a proximal end and a distal end;
a release assembly having a proximal end and a distal end; and
a hand grip having a first tip and a second tip sized and configured to snap onto and engage the proximal end of the holder and release assemblies, respectively, so that actuation of the hand grip moves the holder assembly with respect to the release assembly,
wherein;

the hand grip includes a first grip member, a second grip member, a first jaw member, and a second jaw member, the first grip member pivotally coupled to the second grip member, and the first and second jaw members are operatively associated with the holder and release assemblies, respectively.

67. (original) The instrument of claim 66, wherein the first grip member is pivotally coupled to the first jaw member and the second grip member is pivotally coupled to the second jaw member.

68. (original) The instrument of claim 67, wherein the first grip member further includes a pin slidably movable in a slot formed in the second jaw member and the second grip member includes a pin slidably movable in a slot formed in the first jaw member to maintain the jaw members in parallel alignment when the instrument is actuated.

69. (original) The instrument of claim 68, wherein the first and second jaw members further include a tip sized and configured to snap onto and engage corresponding slots formed in the holder and release assemblies.

70. (original) The instrument of claim 69, wherein when the hand grip snaps onto the holder and release assemblies, the hand grip is orientated substantially perpendicular to the longitudinal axes of the holder and release assemblies.

71. (currently amended) The instrument of claim 51 further comprising the longitudinal spinal member and the spinal implant, wherein the longitudinal spinal member is a longitudinal spinal rod and the spinal implant comprises:

- a body having a channel for receiving the spinal rod;
- an anchor member associated with the body[[],]; and
- a fastener for securing the spinal rod to the body and for fixing the angular position of the anchor member with respect to the body.

72. (original) The instrument of claim 71, wherein the body is a generally cylindrical member having an upper portion incorporating the channel, and a lower portion defining a recess, the anchor member further including a curvate head that is shaped and dimensioned to fit within the recess for facilitating polyaxial movement of the body with respect to the anchor member.

73. (original) The instrument of claim 72, wherein the lower portion of the body surrounding the recess is at least partially compressible to allow the body to be snapped over the curvate head.

74. (original) The instrument of claim 73, wherein the spinal implant further includes a collar slidably disposed around the lower portion of the body, the collar having an inner surface that interacts with an exterior surface of the lower portion of the body to compress the recess around the curvate head when the collar is pressed downward with respect to the body.

75. (original) The instrument of claim 74, wherein the fastener is a set screw sized and configured to engage internal threads formed on an inside surface of the upper portion of the body member such that tightening the fastener onto the body moves the fastener against the spinal rod when the rod is located in the channel and urges the spinal rod against the collar causing the collar to move downward along the exterior surface of the lower portion of the body thereby contracting the recess around the curvate head of the anchor member, locking the angular position of the anchor member with respect to the body.

76. (original) The instrument of claim 75, wherein the holder assembly includes a pair of fingers at a distal end thereof, the fingers being sized and configured to allow an axial upward force to be applied to the locking collar.